

AMENDMENTS TO THE CLAIMS

1-22. (Cancelled)

23. (Previously Presented) An electrolytic processing method for electrolytically processing a surface of a workpiece, comprising:

bringing the workpiece into contact with a processing electrode, the processing electrode having an ion exchanger disposed on a surface of the processing electrode and having a narrower width than the workpiece; and

processing the surface of the workpiece while allowing the processing electrode and the workpiece to make a relative movement,

wherein a substantial contact width between the workpiece and such a portion of the ion exchanger as used in processing is kept constant during the processing.

24. (Previously Presented) The electrolytic processing method according to claim 23, wherein at least a portion of the ion exchanger exposed on the surface of the processing electrode is brought into a substantial contact with the workpiece over a full width of the exposed portion.

25. (Previously Presented) An electrolytic processing method, comprising:

bringing a workpiece close to or into contact with a processing electrode having an ion exchanger covering a surface of an electrode;

applying a voltage between the processing electrode and a feeding electrode that feeds electricity to the workpiece;

supplying a fluid between the workpiece and at least one of the processing electrode and the feeding electrode; and

processing a surface of the workpiece while allowing the processing electrode and the workpiece to make a first relative movement, which is a relative reciprocating movement in a first direction, and, at the same time, allowing the workpiece and the processing electrode to make a second relative movement, which is a relative movement in the first direction for a distance corresponding to an integral multiple of a pitch as determined in a processing amount distribution of the workpiece in the first direction, obtained in the first relative movement.

26. (Previously Presented) The electrolytic processing method according to claim 25, wherein a speed of the first relative movement is changed.

27. (Previously Presented) The electrolytic processing method according to claim 25, wherein the processing electrode is comprised of a plurality of electrode members disposed in parallel.

28. (Original) The electrolytic processing method according to claim 25, wherein the second relative movement is a reciprocating movement.

29. (Previously Presented) The electrolytic processing method according to claim 28, wherein the moving distance in the reciprocating movement of the second relative movement differs between a forward movement and a backward movement.

30. (Previously Presented) The electrolytic processing method according to claim 28, wherein the second relative movement is repeated, and the moving direction of the workpiece in the second relative movement is changed by rotating the workpiece through a predetermined rotational angle.

31. (Previously Presented) The electrolytic processing method according to claim 25, wherein at least one of the voltage and an electric current applied between the processing electrode and the feeding electrode is changed during electrolytic processing.

32. (Previously Presented) The electrolytic processing method according to claim 25, wherein a speed of the second relative movement is changed during electrolytic processing.

33. (Previously Presented) An electrolytic processing method, comprising:
bringing a workpiece close to or into contact with a processing electrode having an ion exchanger covering a surface of an electrode;
applying a voltage between the processing electrode and a feeding electrode that feeds electricity to the workpiece;

supplying a fluid between the workpiece and at least one of the processing electrode and the feeding electrode; and

processing a surface of the workpiece while allowing the processing electrode and the workpiece to make a first relative movement and, at the same time, allowing the workpiece and the processing electrode to make a second relative movement in a first direction, wherein the second relative movement is repeated, and a moving direction of the workpiece in the second relative movement is changed by rotating the workpiece through a predetermined rotational angle.

34. (Previously Presented) The electrolytic processing method according to claim 33, wherein a speed of the first relative movement is changed.

35. (Cancelled)

36. (Previously Presented) The electrolytic processing method according to claim 33, wherein the rotation of predetermined rotational angle is repeated so that the workpiece makes at least one revolution until completion of the electrolytic processing of the workpiece.

37. (Cancelled)

38. (Original) The electrolytic processing method according to claim 33, wherein the workpiece is not rotated during the second relative movement.

39. (Previously Presented) The electrolytic processing method according to claim 33, wherein at least one of the voltage and an electric current applied between the processing electrode and the feeding electrode is changed during electrolytic processing.

40. (Previously Presented) The electrolytic processing method according to claim 33, wherein a speed of the second relative movement is changed during electrolytic processing.

41-56. (Cancelled)

57. (Currently Amended) A substrate holder for holding a substrate and bringing the substrate into contact with a processing electrode to carry out electrolytic processing of the substrate, comprising:

- a flange portion connected to a shaft; ~~and~~
- a chucking member which can move with respect to the flange portion in an axial direction of the shaft and which holds the substrate; and
- a first pressure chamber formed between the flange portion and the chucking member, the first pressure chamber being defined by the flange portion, the chucking member, and an elastic member linking the flange portion and the chucking member,
- wherein a fluid is supplied to the first pressure chamber to pressurize the first pressure chamber, thereby bringing the substrate held by the chucking member into contact with the processing electrode.

58-59. (Cancelled)

60. (Currently Amended) ~~The substrate holder according to claim 57, wherein A~~ substrate holder for holding a substrate and bringing the substrate into contact with a processing electrode to carry out electrolytic processing of the substrate, comprising:

- a flange portion connected to a shaft;
- a chucking member which can move with respect to the flange portion in an axial direction of the shaft and which holds the substrate; and
- a weight of a predetermined weight is attached to the chucking member to adjust a pressure applied to the processing electrode by the substrate.

61. (Original) The substrate holder according to claim 57, further comprising:
an air cylinder for pressing the chucking member downward.

62. (Original) The substrate holder according to claim 57, the chucking member including:

- a chucking plate having a through-hole communicating with the substrate;
- a stopper plate provided above the chucking plate; and

a second pressure chamber formed between the chucking plate and the stopper plate, wherein the second pressure chamber is depressurized by drawing a fluid from the second pressure chamber; thereby attracting the substrate to the chucking member.

63. (Previously Presented) The substrate holder according to claim 57, wherein a retainer ring having an inward-protruding portion is mounted to the flange portion, and a protrusion for engaging the protruding portion of the retainer ring is provided in the chucking member.

64-67. (Cancelled)

68. (Previously Presented) An electrolytic processing method, comprising:
providing a processing electrode and a feeding electrode;
applying a voltage between the processing electrode and the feeding electrode;
holding a substrate by a substrate holder, the substrate holder including a flange portion connected to a shaft and a chucking member for holding the substrate;
disposing an ion exchanger between the substrate and at least one of the processing electrode and the feeding electrode; and
allowing the substrate to be in contact with the processing electrode while allowing the substrate and the processing electrode to make a relative movement, thereby processing the surface of the substrate.

69. (Original) The electrolytic processing method according to claim 68, including:
supplying a fluid to a first pressure chamber formed between the flange portion and the chucking member of the substrate holder to pressurize the first pressure chamber, thereby bringing the substrate held by the chucking member into contact with the processing electrode.

70. (Cancelled)

71. (Previously Presented) The electrolytic processing method according to claim 69, wherein a pressure of the fluid supplied to the first pressure chamber is adjusted so that a pressure applied to the substrate becomes not more than 6.86 kPa.

72-84. (Cancelled)